

WHAT IS CLAIMED IS:

1. An image-forming apparatus comprising a rear
plate including electron-emitting devices formed
thereon, a face plate including a fluorescent film
5 formed thereon and being disposed to face said rear
plate, a spacer in the form of a flat plate disposed
between said rear plate and said face plate, and an
outer frame surrounding peripheral edges of said rear
plate and said face plate, electrons emitted from said
10 electron-emitting devices being irradiated to said
fluorescent film to thereby display an image under
condition where an inner space of a container
constructed by said rear plate, said face plate and
said outer frame is evacuated through a vent tube into
15 a depressurized state, wherein said vent tube is
attached to a side of said outer frame that is
positioned across an imaginary extension of said
flat-plate spacer in the longitudinal direction
thereof, or to said face plate or said rear plate in
20 the vicinity of said side of said outer frame.

2. An image-forming apparatus according to claim
1, wherein said vent tube is provided in plural number.

25 3. An image-forming apparatus according to claim
1, wherein said spacer is provided in plural number.

4. An image-forming apparatus according to claim 1, wherein said outer frame of the container is in the form of a rectangle with two vent tubes disposed in opposite corners of the rectangle.

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5. An image-forming apparatus according to claim 4, wherein said spacer is not positioned across a straight line connecting said two vent tubes.

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6. An image-forming apparatus according to claim 4, wherein said spacer is provided in plural number and arranged in a zigzag pattern with respect to one longitudinal side of said outer frame.

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7. An image-forming apparatus according to claim 1, wherein said electron-emitting devices are surface conduction electron-emitting devices.

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8. A manufacture method of an image-forming apparatus comprising a rear plate including electron-emitting devices formed thereon, a face plate including a fluorescent film formed thereon and being disposed to face said rear plate, a spacer in the form of a flat plate disposed between said rear plate and said face plate, and an outer frame surrounding peripheral edges of said rear plate and said face plate, electrons emitted from said electron-emitting devices being

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irradiated to said fluorescent film to thereby display
an image under condition where an inner space of a
container constructed by said rear plate, said face
plate and said outer frame is evacuated into a
5 depressurized state, wherein said method comprises
providing a vent tube attached to a side of said outer
frame that is positioned across an imaginary extension
of said flat-plate spacer in the longitudinal direction
thereof, or to said face plate or said rear plate in
10 the vicinity of said side of said outer frame, and
evacuating the inner space of said container through
the vent tube.

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